PHASE II HRS TEST STUDY
PRELIMINARY ASSESSMENT (PA) REVIEW

Site: Seymour of Sycamore
Sycamore, IL

EPA ID#: ILD005100789

Region: V

HQST

Reviewer: C. Patton

o Site Summary

The Seymour of Sycamore site is an active 12.8-acre paint factory located in northwest Sycamore, Illinois. The plant began operations in 1963. A 2,000 gallon capacity tank trailer, which contained the equivalent of 25 drums of paint waste material, and 32 drums of additional wastes were buried onsite in 1977 in a shallow trench. The facility hired Environmental Resources Management North Central, Inc. in 1987 to remove these buried wastes and to conducted a hydrogeologic study. The paint wastes were hauled from the site and the contaminated soils were stored in piles around the excavation pit. Samples taken from the piles detected primarily tolulene, xylenes, nine other volatile compounds, and eight metals, including chromium. Wastes generated onsite are currently piped to two above-ground storage tanks. Seymour of Sycamore is currently classified as a RCRA generator. Deep groundwater resources (900 to 1300 feet deep) are used for domestic purposes in the area. The site is not fenced and a surface water migration pathway was not identified.

o Recommendations

Due to low target populations, lack of a surface water pathway and low waste quantity values, this site was recommended for no further remedial action under SARA. The site was referred to the state for monitoring of future remedial actions planned by the facility.

o Pathways of Concern

The air, groundwater and onsite pathways were evaluated. Due to low waste quantity values, the overall threat of release to the air pathway is low. The groundwater pathway is significant if the population drawing from the deeper aquifers is considered. The accessibility of the site, and a large nearby population pose a threat via the onsite pathway. Six thousand people live within 1-mile of the site. No surface water migration pathway was identified.

o Unique Data Collection Sources/Approaches

- Used house-count off of a topographic map and multiplied by census data for number of people per household to obtain population data.
- In urban areas, population was estimated using a planimeter to determine area and average population density information.
- Lack of a surface water pathway was determined during the offsite reconnaissance (see QA section).
- Well information was provided by local water departments.
- Sycamore Township Assessors office provided information on the property owner.
- A U.S. Fish and Wildlife Service North Region Endangered and Threatened Species publication provided information on sensitive environments.

o Perceived Completeness and Clarity of Guidance

- The PA was well written and provided a good summary of HRS factors. The spill of solvents and fires which occurred onsite were mentioned in the PA Questionnaire but were not included in the PA report.
- The PA Questionnaire was filled out correctly.
- The PreScore sheets were filled out correctly. In most cases, calculations and assumptions were given. This reflects a good working knowledge of the HRS model and a good attempt to work within the guidance provided.
- Although it is likely a Regional call, should NFRAP recommendations consider a site representative's intention to continue remedial action at a site?

o Qualitative QA of Score Sheets

- The evaluator made an excellent attempt to provide comments, calculations and assumptions for the score sheets. Don't forget to reference all comments.
- The air comments section mentions possibility of determining an observed release via sampling. How would releases from the piles by distinguished from permitted releases from the facilities manufacturing processes?
- Was the top 6 inches of soil covering the burried tanks and drums contaminated? Were the borings sampled? At what depth? Check gas containment values.
- Why wasn't the 750 to 1000 gallon spill of solvents considered in waste quantity calculations? Was it considered product?
- Were the contents of the buried drums and the buried tank sampled?
- Specifically, which well was used for the hydraulic conductivity and sorptive capacity calculations?
- Can the population which draws its groundwater from the deeper aquifer actually be considered? That is, if the wells are screened between 900 and 1300 feet, is the top of this aquifer at

129 feet? Are the HC and SC calculations representative of these wells?
- Could the onsite pathway waste quantity be estimated using the area of ground covered by contaminated soil? Would the waste quantity change?
- Is the site in a flood plain? Could the ditch containing site runoff be inundated by a flood? Check potential to release by flood.

o PA Cost/LOE

Total Cost: $6,027

Other costs (outside of "normal" LOE): $127.52 (maps, photos, well logs)

Total LOE: 118 hours.

Major time consuming tasks:		
	PA Questionnaire	16 hrs.
	PA Report	36 hrs.
	PreScore	20 hrs.

o Correlation of Recommendations with Professional Judgment

The small waste quantity onsite makes the threat of release to the air and onsite pathways low. All surface drainage is contained in a ditch. Although there is a population drinking groundwater from the deeper aquifer the potential for release to groundwater is relatively low. Given these site characteristics, the NFRAP recommendation is reasonable. The site was referred to the state for oversite of remedial action planned by the facility.

o Highlights of Project Survey Form

- GEMs data were not useful or accurate.
- Training in Washington was helpful and clarified PreScore Guidance.
- How or when to make references or comments on the scoresheets was confusing, especially when the HRS-2 draft was referenced.
- Work completion was not difficult within the time limit.
- Projected HRS score was relatively easy to obtain, because much hard data were available and the preliminary and projected scores were close.
- Should the PA Questionnaire address a potential release to surface water via contaminated groundwater?